

WHAT IS CLAIMED IS:

1. A method of embossing a web, the method comprising the steps of:
 - (a) providing a first embossing roll having a first embossing pattern disposed thereon;
 - (b) providing a second embossing roll that is engaged with the first embossing roll, the second embossing roll having a second embossing pattern disposed thereon, the first embossing pattern and the second embossing pattern being complementary;
 - (c) maintaining the second embossing roll at a first temperature;
 - (d) applying an adhesive to the second embossing roll;
 - (e) contacting a web of sheet material with the second embossing roll such that the adhesive forms an adhesive pattern on the web of sheet material in register with the second embossing pattern of the second embossing roll;
 - (f) passing the web of sheet material between the first embossing roll and the second embossing roll wherein the first embossing roll and the second embossing roll emboss the web with the complementary embossing pattern;
 - (g) providing a belt disposed about at least a portion of the second embossing roll, the belt having a second temperature that is different from the first temperature;
 - (h) passing the web between the belt and the second embossing roll; and
 - (e) removing the web of sheet material from the second embossing roll.
2. The method of Claim 1 wherein the second temperature of the belt is lower than the first temperature of the second embossing roll.
3. The method of Claim 1 wherein the second embossing roll is heated.
4. The method of Claim 1 wherein the belt is heated or cooled by means of a vacuum plenum disposed adjacent at least a portion of the belt that passes air over at least a portion of the belt.
5. The method of Claim 4 wherein the vacuum plenum provides a vacuum to help remove the web from the surface of the second embossing roll.
6. A method of modifying a web, the method comprising the steps of:

- (a) providing a first embossing roll having a first embossing pattern disposed thereon;
 - (b) providing a second embossing roll that is engaged with the first embossing roll, the second embossing roll having a second embossing pattern disposed thereon, the first embossing pattern and the second embossing pattern being complementary;
 - (c) maintaining the second embossing roll at a first temperature;
 - (d) providing a belt in contact with at least a portion of the surface of the second embossing roll, the belt having a second temperature that is higher than the first temperature such that the belt heats a region of the surface of the second embossing roll;
 - (e) applying an adhesive to the second embossing roll in the region of the surface of the second embossing roll heated by the belt;
 - (f) contacting a web of sheet material with the second embossing roll such that the adhesive forms an adhesive pattern on the web of sheet material in register with the second embossing pattern of the second embossing roll;
 - (g) passing the web of sheet material between the first embossing roll and the second embossing roll wherein the first embossing roll and the second embossing roll emboss the web with the complementary embossing pattern; and
 - (h) removing the web of sheet material from the second embossing roll.
7. The method of Claim 6 wherein the second embossing roll is cooled to the first temperature.